

IN THE CLAIMS

Please cancel Claim 12 without prejudice or disclaimer.

Claim 1 (cancelled).

Claim 2 (previously amended): The switching amplifier controller according to Claim 9 wherein the switching output stage comprises an Hbridge having 4 power switches configured to drive a load in a bridge tied configuration.

Claim 3 (previously amended): The switching amplifier controller according to Claim 9 further comprising a shoot through detector configured to assist the timing controller resolve the turn -on and turn-off switching transitions such that shoot through is negated during the switching transitions.

Claim 4 (previously amended): The switching amplifier controller according to Claim 9 wherein the timing controller is an adaptive timing controller that operates in response to a shoot through feedback signal generated by the switching output stage such that shoot through is negated during the switching transitions.

Claim 5 (previously amended): The switching amplifier controller according to Claim 9 wherein the timing controller is further configured to prevent switching output stage shoot through during the switching transitions.

Claims 6-8 (cancelled).

Claim 9 (original): A switching amplifier controller comprising:

a switching output stage comprising an Hbridge having 4 power switches configured to drive a load in a bridge tied configuration;

a shoot through detector operative to detect shoot through generated by the switching output stage and generate a shoot through signal in response thereto;

a shoot through encoder operative to generate a shoot through feedback signal in response to the shoot through signal;

an adaptation controller operative to generate adaptive control signals in response to the shoot through feedback signal;

a timing controller operative to generate a first set of timing control signals in response to a PWM input signal and the adaptive control signals;

a signal combiner operative to generate a second set of timing control signals in response to the first set of timing control signals; and

a plurality of power switch drivers operative to generate power switch turn-on signals and power switch turn-off signals in response to the second set of timing control signals to control power switch turn -on and turn-off switching transitions such that dead time associated with the switching transitions is substantially eliminated and further such that shoot through is negated during switching transitions subsequent to detection of shoot through via the shoot through detector.

Claims 10-12 (cancelled).

Claim 13 (currently amended): A switching amplifier controller comprising:

a switching output stage; and

means for controlling turn -on and turn -off switching transitions associated with the switching output stage in response to a shoot through feedback signal caused by switching output stage shoot through, such that dead time associated with the switching transitions is substantially eliminated and further such that shoot through is negated during the switching transitions subsequent to a switching transition exhibiting shoot through.

wherein the means for controlling turn-on and turn-off switching transitions comprises:

a shoot through detector operational to detect switching output stage shoot through and generate an output signal in response thereto; and

an encoder operational to generate the shoot through feedback signal in response to the shoot through detector output signal.

~~The switching amplifier according to Claim 12~~ wherein the means for controlling turn-on and turn-off switching transitions further comprises:

an adaptation controller operative to generate adaptive control signals in response to the shoot through feedback signal;

a timing controller operative to generate a first set of timing control signals in response to a PWM input signal and the adaptive control signals;

a signal combiner operative to generate a second set of timing control signals in response to the first set of timing control signals; and

a plurality of switch drivers operative to generate switching output stage turn-on signals and switching output stage turn -off signals in response to the second set of timing control signals to control switch turn-on and turn-off switching transitions.

Claims 14 and 15 (cancelled).